

consequently to the mouth; this is the highest one: the other, less prominent and placed laterally, gives passage to the water which traverses the branchiæ, to the residues of digestion, and to the products of reproduction.

Between these two orifices a small opaque-white nucleus may be distinguished through the tissue, with delicate filaments issuing from it: this is the nervous ganglion.

Thus *Chevreulius* is undoubtedly an Ascidian, but it is a *bivalve* Ascidian, of which the test is divided into two parts moveable upon each other, as in the Acepala; and the Ascidia themselves must be arranged in two series—one for those in which the external envelope is a true little leather bottle with two apertures, the other for those in which the test, divided into two parts by a broad horizontal cleft, becomes bivalve.

Having met with *Chevreulius* for the first time in the waters of Calle, I have named it *C. callensis*. It lives at great depths (60, 80, or 100 fathoms), and belongs to the fauna of the coralligenous zone.

In conclusion, the author remarks upon the interest attaching to the discovery of *Chevreulius*, as an Ascidian with an upper and lower valve, in connexion with the relation existing between the Tunicata and Brachiopoda.—*Comptes Rendus*, June 19, 1865, p. 1264.

*On some singular Organs appended to the Feet of certain Crustacea.*

By MM. CLAUS and SARS.

Professor Claus (*Zeitschr. wiss. Zool.* xiii. p. 422) and Professor Sars (*Videnskabselskab. Förhandl.* 1863) have independently investigated the Schizopod Crustacea of the family Euphausidæ with regard to the singular organs already alluded to by Dana, Semper, and Krøyer, and regarded by Semper as eyes, and by Krøyer as auditory organs. These are spherical organs, of a reddish colour, situated at the base of several of the thoracic legs and of the first four pairs of abdominal appendages. Both the authors above mentioned have demonstrated the correctness of Semper's view, although, besides these pedal eyes, the animals possess the two large compound eyes common to all Decapoda. Each of the thoracic and abdominal eyes receives a special nerve from the ventral ganglionic chain. The organ itself is a spherical bulb, moved by special muscles; and in it may be distinguished a crystalline lens, a vitreous body, a pigment-layer, and a retina of complex structure. The existence of a crystalline lens distinct from the cornea is very striking, as remarked by M. Sars; for in other Crustacea no true crystalline exists, its function being performed by the thickened and inflated cornea. According to M. Claus, the position of the four pairs of abdominal eyes is very remarkable: the first pair looks forwards, the last pair backwards, and the two intermediate pairs downwards.—*Bibl. Univ.* May 1865, *Bull. Scient.* p. 63.